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PERPENDICULAR MAGNETIC  
RECORDING MEDIA WITH IMPROVED  
INTERLAYER

**ABSTRACT OF THE DISCLOSURE**

A low noise, high areal recording density, perpendicular magnetic recording medium comprises:

- (a) a non-magnetic substrate having a surface; and
- (b) a layer stack formed over the substrate surface, the layer stack comprising, in overlying sequence from the substrate surface:
  - (i) a magnetically soft underlayer;
  - (ii) at least one non-magnetic interlayer; and
  - (iii) a CoCr-based, magnetically hard perpendicular recording layer;

10 wherein the compositions of the at least one non-magnetic interlayer and the CoCr-based, magnetically hard perpendicular recording layer are selected to provide the medium with a negative nucleation field  $H_n$ , remanent squareness of about 1, and high coercivity of at least about 5,000 Oe.

15 A method for manufacturing the medium by means of DC magnetron sputtering of layers (i) - (iii) is also disclosed.